Rombus™
Carpet Maintainer

WINDSOR

Operating Instructions (ENG)

MODELS: ***RMBS12 FROM S/N12236***
RMBS16 FROM S/N 16905

QUEST® . . . for Continuous Improvement.
Windsor's Quality Management System is Certified ISO 9001.

Read instructions before operating the machine.

A

980279 09/20/05

MODEL _____

DATE OF PURCHASE _____

SERIAL NUMBER _____

SALES REPRESENTATIVE # _____

DEALER NAME _____

OPERATIONS GUIDE NUMBER _____

PUBLISHED _____

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YOUR DEALER

Name: _____

Address: _____

Phone Number: _____

OVERVIEW

The Windsor Rombus Carpet Maintainer is designed to maintain your carpet using the Rombus quick clean, quick dry carpet care system. The machine has two counter rotating brushes that help scrub chemical into the carpet. The chemical, Red Carpet Rombus Carpet Clean Chemical, encapsulates the dirt, allowing both to be vacuumed up once the chemical has dried. The brushes also help to raise the pile of the carpet, giving it a lush groomed appearance.

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This manual contains the following sections:

- HOW TO USE THIS MANUAL
- SAFETY
- OPERATIONS
- MAINTENANCE
- PARTS LIST

The HOW TO USE THIS MANUAL section will tell you how to find important information for ordering correct repair parts.

Parts may be ordered from authorized Windsor dealers. When placing an order for parts, the machine model and machine serial number are important. Refer to the MACHINE DATA box which is filled out during the installation of your machine. The MACHINE DATA box is located on the inside of the front cover of this manual.

MODEL _____

DATE OF PURCHASE _____

SERIAL NUMBER _____

SALES REPRESENTATIVE # _____

DEALER NAME _____

OPERATIONS GUIDE NUMBER _____

PUBLISHED _____

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The model and serial number of your machine is on the operator's left hand side, side panel of base.

The SAFETY section contains important information regarding hazard or unsafe practices of the machine. Levels of hazards is identified that could result in product or personal injury, or severe injury resulting in death.

The OPERATIONS section is to familiarize the operator with the operation and function of the machine.

The MAINTENANCE section contains preventive maintenance to keep the machine and its components in good working condition.

The PARTS LIST section contains assembled parts illustrations and corresponding parts list. The parts lists include a number of columns of information:

- **REF –** column refers to the reference number on the parts illustration.
- **PART NO.** – column lists the part number for the part.
- **QTY** – column lists the quantity of the part used in that area of the machine.
- **DESCRIPTION** – column is a brief description of the part.
- **SERIAL NO. FROM** – column indicates the first machine the part number is applicable to. When the machine design has changed, this column will indicate serial number of applicable machine. The main illustration shows the most current design of the machine. The boxed illustrations show older designs. If column has an asterisk (*), call manufacturer for serial number.
- **NOTES** – column for information not noted by the other columns.

NOTE: If a service or option kit is installed on your machine, be sure to keep the KIT INSTRUCTIONS which came with the kit. It contains replacement parts numbers needed for ordering future parts.

NOTE: The 98# on the lower left corner of the front cover is the part number for this manual.

IMPORTANT SAFETY INSTRUCTIONS

When using an electrical appliance, basic precaution must always be followed, including the following:

READ ALL INSTRUCTIONS BEFORE USING THIS MACHINE.

⚠ WARNING: **This machine is for commercial use.**

To reduce the risk of fire, electric shock, or injury:

Connect to a **properly grounded outlet**. See Grounding Instructions.

Do not leave the machine unattended. Unplug machine from outlet when not in use and before maintenance or service.

Do not allow machine to be used as a toy. **Close attention** is necessary when used by or near children.

Use only as described in this manual. Use only manufacturer's recommended components and attachments.

Do not use damaged electrical cord or plug. Follow all instructions in this manual concerning grounding the machine. If the machine is **not working properly**, has been dropped, damaged, left outdoors, or dropped into water, return it to an authorized service center.

Do not pull or carry machine by electrical cord, use as a handle, close a door on cord, or pull cord around sharp edges or corners.

Do not run machine over cord or allow the rotating brushes to come in contact with the cord. **Keep** cord away from heated surfaces.

Do not unplug machine by pulling on cord. To unplug, grasp the electrical plug, not the electrical cord.

Always use cable restraint provided and wind the cable around the cable holder on the handle. For quick release of the electrical cable rotate the cable holder 180 degrees.

Do not handle the electrical plug or machine with wet hands.

Do not operate the machine with any openings blocked. Keep openings free of debris that may reduce airflow.

Machine is designed for indoor use only and must not be operate or stored outdoors in wet conditions.

Turn off all controls before unplugging.

Machine can cause a fire when operating near flammable vapors or materials. Do not operate this machine near flammable fluids, dust or vapors.

Only the brushes provided with the machine or those specified by the manufacturer can be used. The intended use of the brushes is specifically for the cleaning of carpeting and should not be used in any other way.

This machine is suitable for commercial use, for example in hotels, schools, hospitals, factories, shops and offices for more than normal housekeeping purposes.

Maintenance and repairs must be done by qualified personnel.

SAVE THESE INSTRUCTIONS

The following symbols are used throughout this guide as indicated in their descriptions:

HAZARD INTENSITY LEVEL

There are three levels of hazard intensity identified by signal words -**WARNING** and **CAUTION** and ***FOR SAFETY.*** The level of hazard intensity is determined by the following definitions:

⚠ WARNING

WARNING - Hazards or unsafe practices which COULD result in severe personal injury or death.

⚠ CAUTION

CAUTION - Hazards or unsafe practices which could result in minor personal injury or product or property damage.

FOR SAFETY: To Identify actions which must be followed for safe operation of equipment.
Report machine damage or faulty operation immediately. Do not use the machine if it is not in proper operating condition. Following is information that signals some potentially dangerous conditions to the operator or the equipment. Read this information carefully. Know when these conditions can exist. Locate all safety devices on the machine. Please take the necessary steps to train the machine operating personnel.

FOR SAFETY:
DO NOT OPERATE MACHINE:
Unless Trained and Authorized.
Unless Operation Guide is Read and understood.
In Flammable or Explosive areas.
In areas with possible falling objects.

WHEN SERVICING MACHINE:
Avoid moving parts. Do not wear loose clothing; jackets, shirts, or sleeves when working on the machine. Use Windsor approved replacement parts.

THIS PRODUCT IS FOR COMMERCIAL USE ONLY.

ELECTRICAL:

In the USA this machine operates on a standard 15 amp 115V, 60 hz, A.C. power circuit . The amp, hertz, and voltage are listed on the data label found on each machine. Using voltages above or below those indicated on the data label will cause serious damage to the motors.

EXTENSION CORDS:

If an extension cord is used, the wire size must be at least one size larger than the power cord on the machine, and must be limited to 50 feet (15.5m) in length.

GROUNDING INSTRUCTIONS:

This appliance must be grounded. If it should malfunction or break down, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This appliance is equipped with a cord having an equipment-grounding conductor and grounding plug. The plug must be inserted into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

This appliance is for use on a nominal 120-volt circuit, and has a grounded plug that looks like the plug in “Fig. A”. A temporary adaptor that looks like the adaptor in “Fig . C” may be used to connect this plug to a 2-pole receptacle as shown in “Fig. B”, if a properly grounded outlet is not available. The temporary adaptor should be used only until a properly grounded outlet (Fig. A) can be installed by a qualified electrician. The green colored rigid ear, lug, or wire extending from the adaptor must be connected to a permanent ground such as a properly grounded outlet box cover. Whenever the adaptor is used, it must be held in place by a metal screw.

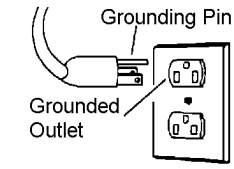


Fig. A

GROUNDING CONNECTION USING AN ADAPTOR

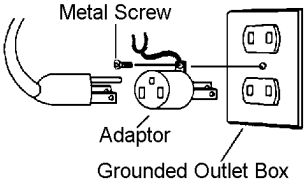


Fig. B

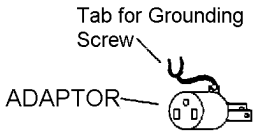


Fig. C

Note: Adaptors are not allowed in Canada.

Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service person if you are in doubt as to whether the outlet is properly grounded. Do not modify the plug provided with the appliance - if it will not fit the outlet, have a proper outlet installed by a qualified electrician.

ITEM	**DIMENSION/CAPACITY**
Electrical	115V
Nominal Power	550W
Rated Amperage	7 Amps
Brush Width - RMBS12 - RMBS16	 12 inches (30 cm) 16 inches (40 cm)
Brush RPM	600 RPM
Wheels	3 inches (7.5 cm) non-marking grey
Dimensions – Weight - RMBS12 - RMBS16	 40 lbs. (18kg) 44 lbs. (20kg)
Dimensions – Height - with handle	 44 inches (112 cm)
Dimensions – Depth	12 inches (30 cm)
Power Cord	33 feet (10 m)

The Windsor Rombus Carpet Maintainer is designed to maintain your carpet using the Rombus Quick Clean, Quick Dry Carpet Care System. By using the Rombus Carpet Maintainer in conjunction with Windsor Red Carpet Rombus Carpet Clean (**W145-4**) chemical solution, you can perform a regular light cleaning and grooming of your carpet very quickly, and have the carpet dry and ready for traffic within 30 minutes.

The Rombus machine handle detaches for easy stair cleaning, transportation and compact storage. The handle has a 180 degree movement for maximum flexibility and allows the machine to clean under low furniture. There is a foot operated on/off switch and handle lock keeping the handle in an upright position when placed in the tray.

The tray is for machine storage when not in use. This will protect the brush bristles from being crushed.

The brush guard protects the machine brushes by preventing loose threads or wires (telephone or electrical) getting caught-up in the brushes.

This appliance conforms with international and national safety directives: EN55014-2, EN5504-1, EN61000-3-2/3-3, EN60335-1/2-10/2-69/2-67. IEC 60335-1/2/10/2-67/2-69. LVD 73/23/EEC.

PRE-RUN MACHINE INSPECTION

Perform a pre-run inspection to find possible problems that could cause poor performance or lost time from breakdown. Check the rating plate to confirm voltage and frequency is the same as the power supply. *NOTE: A 10% variation in voltage is acceptable.*

STARTING MACHINE

NOTE: Perform pre-run machine check before operating machine.
FOR SAFETY: **Before starting machine, make sure that all covers are in place and secured properly.**

1. Connect the machine to a power supply.

2. Take the machine out of the tray. Do this by leaning the machine back and wheeling away from the tray. *NOTE: Place the tray out of the way when machine in use.*

3. Release the handle lock.

4. Depress the foot switch to engage machine.

After applying a light spray of diluted Red Carpet Rombus Carpet Clean onto the carpet using a pressurized tank sprayer, commence cleaning by pushing and pulling the machine slowly over the wetted carpet.

Best results are obtained by moving the machine in multiple directions and overlapping strokes.

⚠ WARNING

Flammable materials can cause an explosion or fire. Do not use flammable materials with this machine.

MACHINE SHUT-DOWN AND STORAGE

1. Depress the foot switch to power off machine.

2. Lock handle in the upright position.

3. Disconnect the power cord from the power supply. Wind the power cord around the cable holder on the handle.

4. Remove the brushes for cleaning. *See Brush Cleaning and Maintenance section.*

5. Once daily maintenance has been performed, place the machine back into the tray.

The machine is now ready for storage until the next use. Make sure to store your equipment in a dry place to prolong the life of your machine. Storage outdoors or unprotected could cause damage to your machine or internal parts, therefore voiding your warranty.

⚠ CAUTION

When not in use or during interrupted cleaning, the machine must always be placed in the tray provided to prevent deformation of the brush bristles. Deformation of brush bristles can result in unbalanced running and excessive vibrating or jumping.

BRUSH CLEANING AND MAINTENANCE

After each session or carpet cleaning, the brushes and the brush housing should be cleaned. Before cleaning or changing the brushes, always unplug the machine from the power supply.

Brushes are removed without tools. Tilt and rest the machine on the handle. Push the brush axles (shafts) out of their bearings by hand. Pull axles through the brush and machine housing.

The brushes may be soaked in warm or hot water using mild detergent, and then rinsed with warm water. *NOTE: Brushes with crushed bristles can often be restored to original condition by soaking in hot water.*

Keep brushes clean and free from debris. Rotate brushes regularly as this will increase the life span of the brushes and ensure even wear.

Before reinstalling brushes, clean out machine brush housing by wiping with a clean damp cloth.

MACHINE MAINTENANCE

The Rombus Maintainer requires very little maintenance. Wipe down the machine periodically with a clean cloth and ensure motor air vents are not obstructed. **DO NOT** spray water directly over the top of machine.

During interruptions of the cleaning process, always place the machine into the tray or lay it on it's side (gear housing) to prevent deformation of the brush bristles.

⚠ CAUTION

Deformation of the brush bristles can result in unbalanced running and excessive vibrating or jumping.

The machine is fitted with an overload switch. In the unlikely event of overloading, the machine overload switch will automatically trip. It can be reset after approximately 30 seconds (or when the machine cools down) by pushing the set button on the gear housing.

DAILY MAINTENANCE

1. Clean and inspect brushes.

2. Clean and inspect brush housing and machine.

3. Inspect power cord for wear or damage. This cable will lie on wet carpet. To prevent electrical shock replace cords that are frayed or have cracked insulation immediately.

PERIODIC MAINTENANCE

1. Check all handles, switches, knobs, electrical cables and connections on your machine for damage. Repair or replace immediately.

2. Inspect and/or replace brushes.

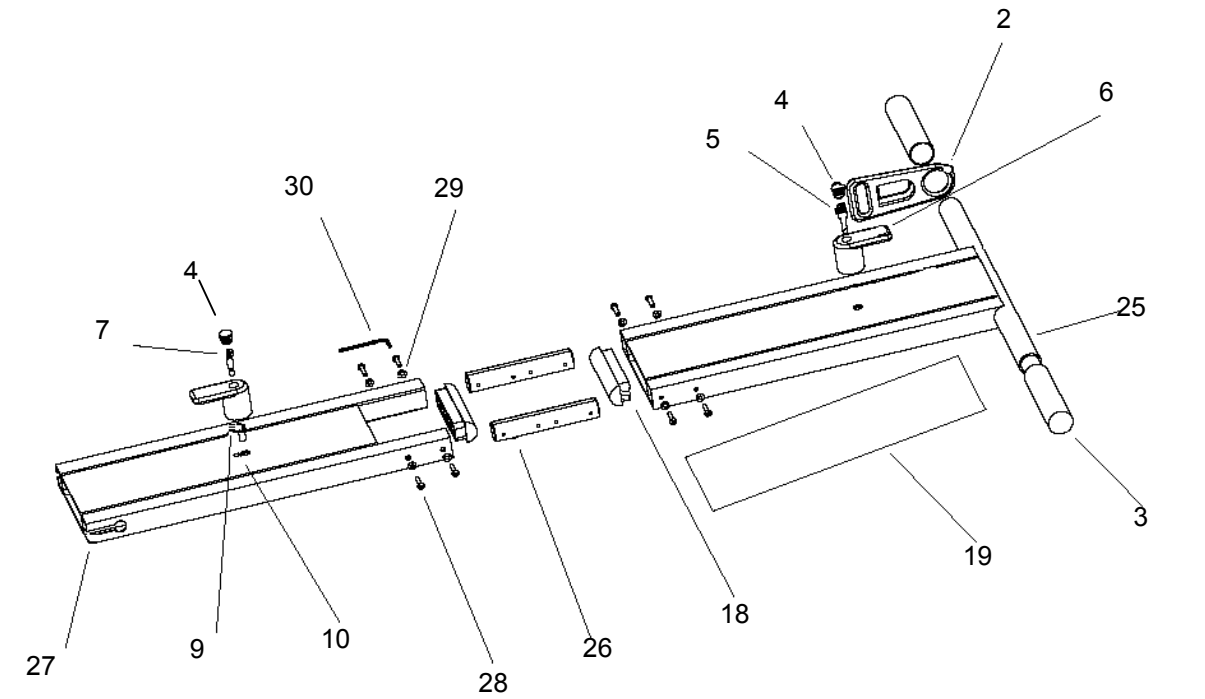
3. Inspect and clean (if necessary) brush guard of any outside debris.

ANNUAL MAINTENANCE

1. Check all bearings for noise and wear.
2. Check motor for operation.
3. Check overall machine for operation.

PROBLEM	CAUSE	SOLUTION
No power to machine	Dead electrical circuit breaker in fuse box	Check building circuit breaker
	Faulty power cord	Replace power cord
	Power switch failure	Replace power switch
	Faulty circuit breaker	Replace circuit breaker
		check for and correct, any
		pg 2-3
	Receptacle not grounded	Have an electrician inspect the building's wiring
		connections, replace any
		continuity. Higher amp draw may indicate faulty parts. Find parts not moving freely and
	Gears worn	Replace gears not functioning
	Brushes worn	Replace brushes
	Worn brush motor brushes	Replace brushes, check commutator
Worn bearings	Bearing squealing or grinding in brush housing	Replace worn bearing

NOTE: The handle view is shown from the Rear. This is to help clarify how the components are attached to the handle asm.



COMPLETE HANDLE ASSEMBLY

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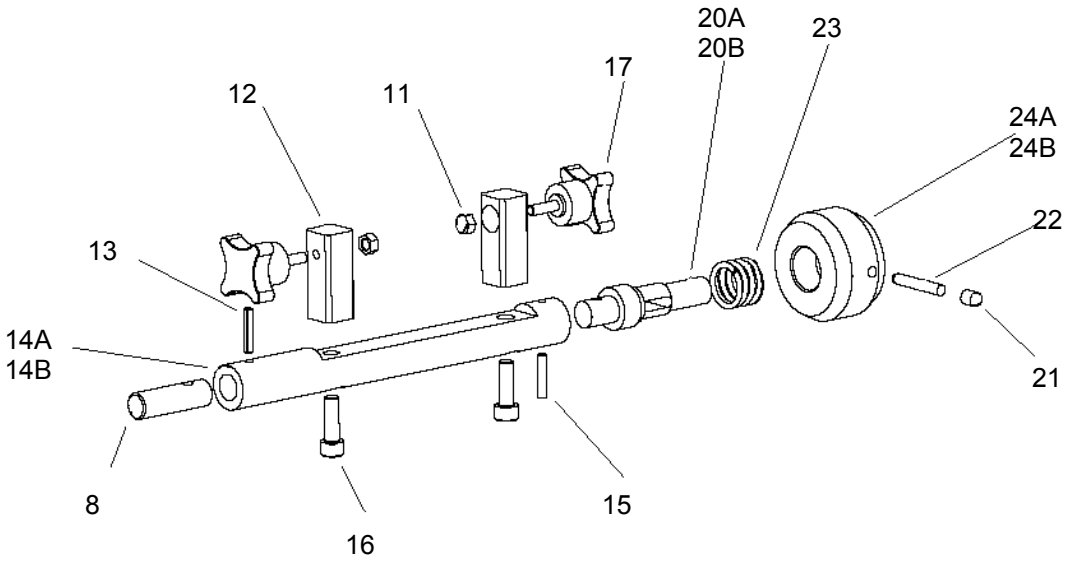
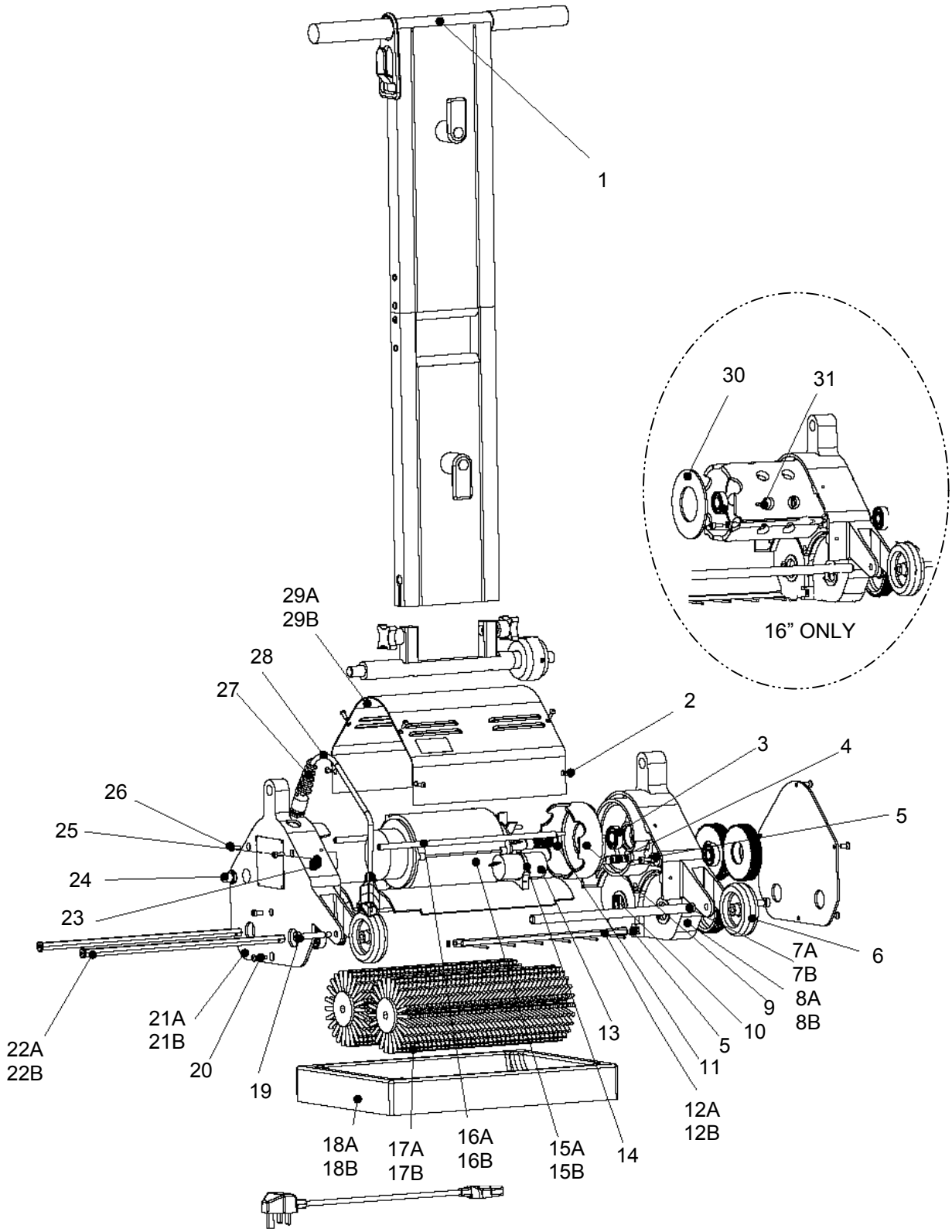


COMPLETE CROSS BAR ASSEMBLY

REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	RMH	1	RMBS HANDLE ASM CMPLT		
2	01014	1	CABLE RESTRAINT		
3	01004	2	HANDLE GRIPS		
4	01008	2	CAP PLUG		
5	01009	1	CAP SCREW		
6	01007	2	CABLE HOLDER		
7	01088	1	CAP SCREW		
8	01505	1	CROSS BAR PIN		
9	01012	1	GYRATORY CBL RTNR SPRING		
10	01013	1	BALL BEARING		
11	01021	2	NYLON, INSERT NUT		
12	01018	2	HANDLE BLOCKS		
13	01017	1	5MM PINS		
14A	01097	1	RMBS12 HANDLE BAR (MCHN SD)		RMBS12 ONLY
14B	01098	1	RMBS16 HANDLE BAR (MCHN SD)		RMBS16 ONLY
15	01090	1	PIN, DOWEL M5		
16	01019	2	M8 BOLT		
17	01020	2	THUMB WHEELS & WASHER		
18	01015	2	CARRY HANDLES		
19	01083	1	RMBS12/16 DECAL		
20A	01093	1	SHAFT, LOCKING 12”		RMBS12 ONLY
20B	01094	1	SHAFT, LOCKING 16”		RMBS16 ONLY
21	01092	1	SCR, M10 SOCKET		
22	01091	1	PIN, DOWEL M6		
23	01089	1	SPRING, 24MM		
24A	01095	1	BUSHING, LOCKING 12”		RMBS12 ONLY
24B	01096	1	BUSHING, LOCKING 16”		RMBS16 ONLY
25	01103	1	UPPER HANDLE BAR		
26	01105	2	HANDLE CONNECTING BAR		
27	01104	1	LOWER HANDLE SECTION		
28	01106	8	SCR, M4 COUNTERSUNK		
29	01107	8	WASHER, M4		
30	01109	1	ALLEN KEY		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16" ONLY
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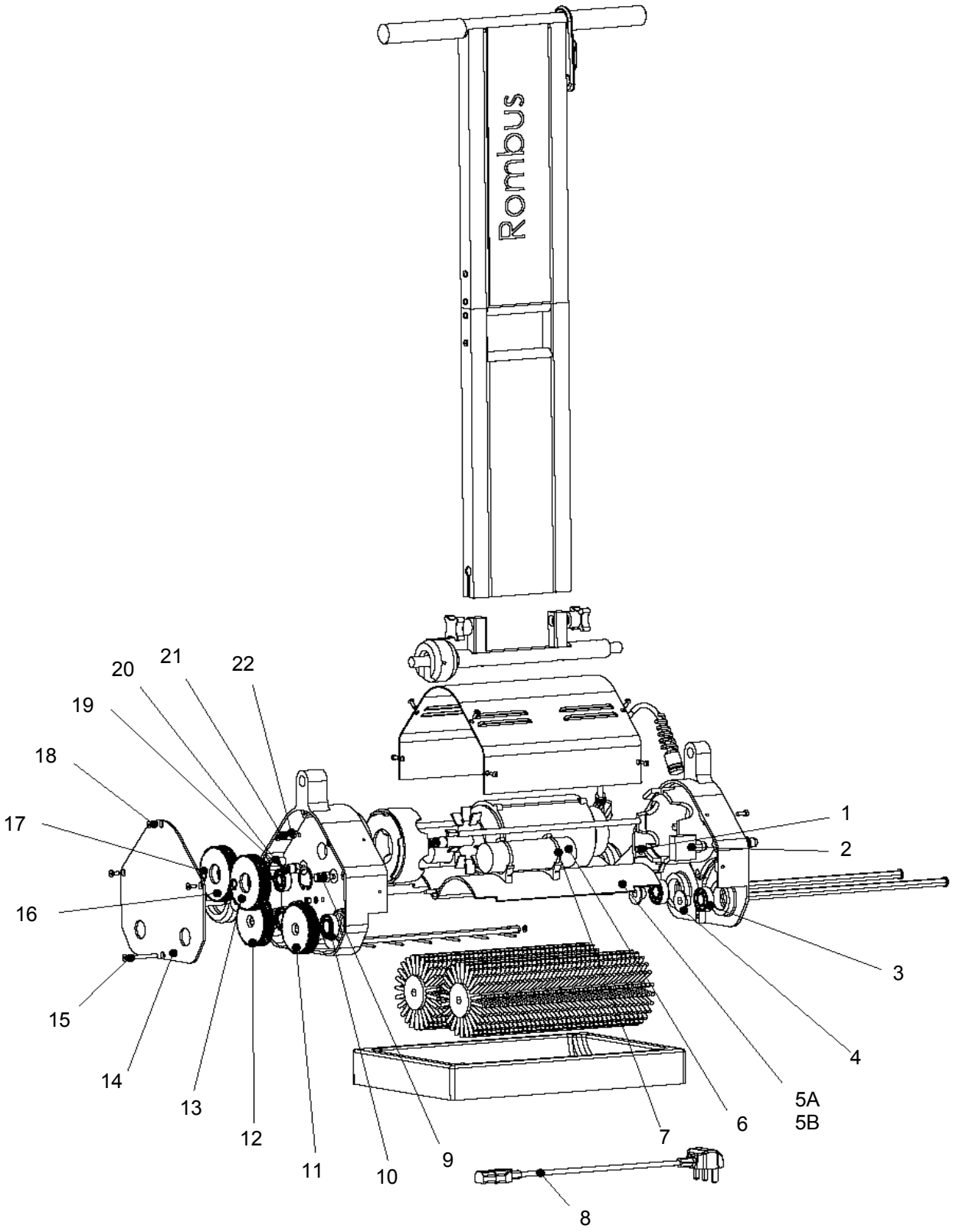
14

REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	RMH	REF	RMBS HANDLE ASM, COMPLETE		
2	01042	8	BUTTON SCREWS		
3	01044	1	BEARING (MOTOR)		
4	01506	2	SCREW (BEARING AXLE)		
5	01046	4	WASHERS		
6	01208	2	WHEELS		
7A	01206	1	WHEEL AXLE, 12”		RMBS12 ONLY
7B	01207	1	WHEEL AXLE, 16”		RMBS16 ONLY
8A	01202	1	END HOUSING, RIGHT, 12”		RMBS12 ONLY
8B	01203	1	END HOUSING, RIGHT, 16”		RMBS16 ONLY
9	01025	1	RMBS12 MTR SUPPORT – FAN END		RMBS12 ONLY
10	01072	2	CIRCLIP, 15MM		
11	01043	1	CIRCLIP, 14MM		
12A	01028	1	RMBS12 CABLE GUARD		RMBS12 ONLY
12B	01039	1	RMBS16 CABLE GUARD		RMBS16 ONLY
13	01053	1	CAPACITOR, RUN		
14	01079	1	CABLE TIE		
15A	01027	1	RMBS12 MOTOR		RMBS12 ONLY
15B	01038	1	RMBS16 MOTOR		RMBS16 ONLY
16A	01030	3	RMBS12 DRAW BARS		RMBS12 ONLY
16B	01041	3	RMBS16 DRAW BARS		RMBS16 ONLY
17A	01002	2	BRUSH, STANDARD WHT 12” (PAIR)		RMBS12 ONLY
17B	01003	2	BRUSH, STANDARD WHT 16” (PAIR)		RMBS16 ONLY
18A	01023	1	RMBS12 PLASTIC TRAY		RMBS12 ONLY
18B	01034	1	RMBS16 PLASTIC TRAY		RMBS16 ONLY
19	01082	2	WHEEL SHAFT		
20	01071	1	SCREW		
21A	01200	1	END HOUSING, LEFT, 12”		RMBS12 ONLY
21B	01201	1	END HOUSING, LEFT, 16”		RMBS16 ONLY
22A	01022	2	RMBS12 BRUSH SHAFT ASM		RMBS12 ONLY
22B	01033	2	RMBS16 BRUSH SHAFT ASM		RMBS16 ONLY
23	01068	1	SWITCH LOCKING NUT		
24	01062	1	THERMAL RESET SWITCH COVER		
25	01067	1	SWITCH		
26	01054	3	SCREW		
27	01076	1	CABLE GLAND		
28	01069	1	MOTOR CABLE 1M		
29A	01026	1	RMBS12 MCHN COVER		RMBS12 ONLY
29B	01037	1	RMBS16 MCHN COVER		RMBS16 ONLY
30	01211	1	DEFLECTOR		RMBS16 ONLY
31	01205	2	SCREW, GRUB M5 X 12 HEX SCT		RMBS16 ONLY


Rombus
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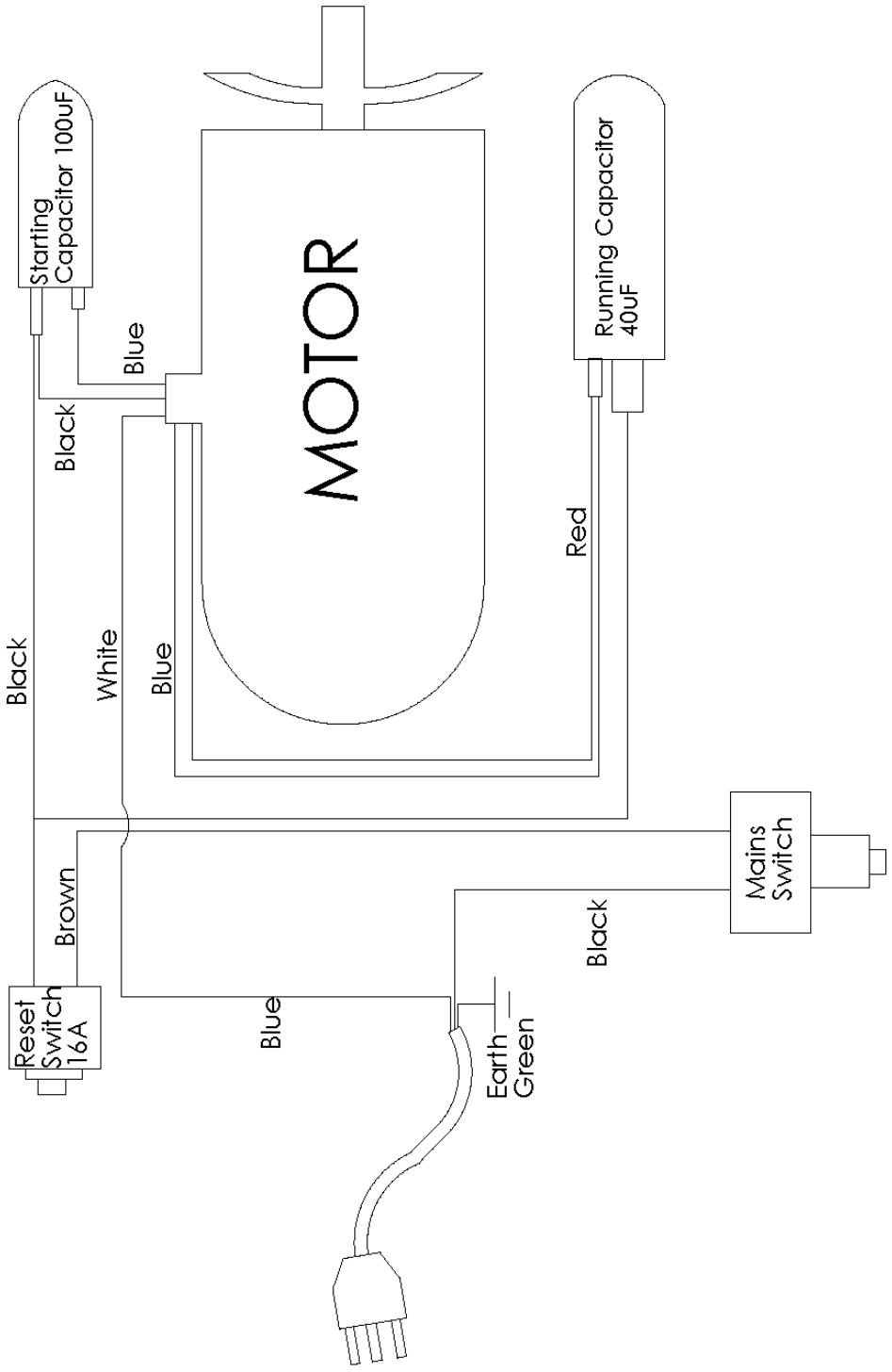
REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	01042	1	BUTTON SCREW		
2	01061	1	THERMAL RESET SWITCH		
3	01060	2	BEARING		
4	01059	2	NYLON BRUSH SHFT HSNG		
5A	01209	1	SPLASH COVER, 12”		RMBS12 ONLY
5B	01210	1	SPLASH COVER 16”		RMBS16 ONLY
6	01045	1	CAPACITOR, START		
7	01079	2	CABLE TIES		
8	01070	1	CABLE 10M		
9	01051	2	BEARING, AXLE		
10	01077	2	BEARING		
11	01050	1	GEAR		
12	01049	1	GEAR		
13	01108	1	GEAR, 6F		
14	01204	1	PLATE, RIGHT END HOUSING		
15	01055	1	SCREW		
16	01047	1	GEAR		
17	01073	2	CIRCLIP, 11MM		
18	01212	3	SCREW		
19	01052	2	BEARING		
20	01074	2	CIRCLIP, 35MM		
21	01078	3	NUT		
22	01046	3	WASHER		


Starting Capacitor 100uF
Blue
Black
MOTOR
Running Capacitor 40uF
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White
Blue
Brown
Mains Switch
Black
Reset Switch 16A
Blue
Earth
Green